CHAPTER ONE

INRODUCTION

IN THIS CHAPTER

1. INTRODUCTION

1.1 CHARACTERISTICS OF EXISTING SYSTEM:

- Our system can provide sign in option for new user through which user can register their information as new user.
- Our system can provide searching feature for user through which user can search appropriate work.
- Our system provide searching feature for contractor to search appropriate work or number of labors.
- User create their own advertisement for work.
- User can send these advertisement to another user as message.
- User can book their name in any work using specific advertisement.
- System can provide Blocking feature to block an appropriate user.

1.2 OVERVIEW OF PROPOSED SYSTEM WITH ADVANTAGES:

Labor Grid System is project that bridge the gap between Labors and Contractor for that they can easily communicate with each other. They are not migrate from one place to another place. Using these system user can create their own account and in touch with world. This web project id developed using PHP as the front end and MySQL database as back end. The database stores various labors and contractor information and many other information related to system.

The user first create their own account as either labor or contractor. After that user can easily interact with the system and use appropriate feature which is user has. For example if user A (Contractor) wants to send message to user B (Labor), user A sends if and only if A has right to send message to B.

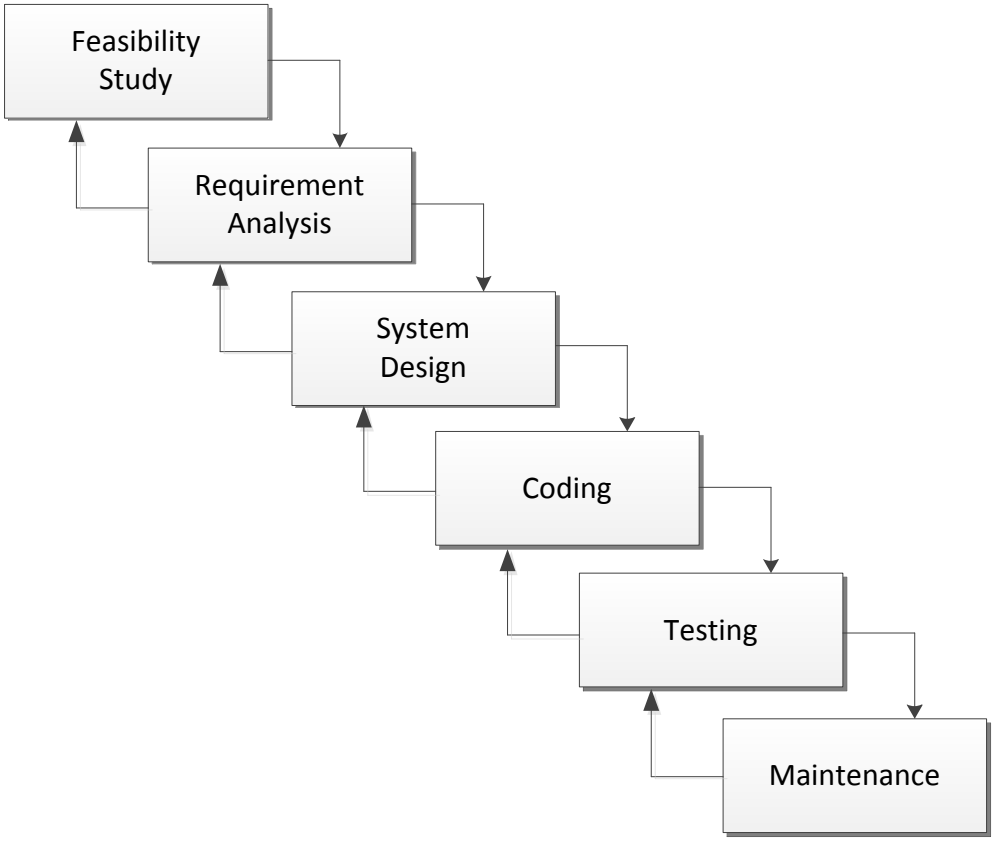
Another feature like blocking is used when any user can block another user who has rights to block can do this. For example user A wants to block user B, so A block B if and only if A has right to block. Here also user C (NGO) can block user B (Contractor). Also many more features through which user can manage their work properly.

So advantage of using these system is labor and contractor now cannot migrate from one place to another place to find their work. All new user can create their account and stay in touch with world. They can easily communicate with each other. NGO easily find contractor for appropriate work. Also if any Contractor wants to find the Labor they can easily do. NGO create one template of work for Contractor. Through these template user can book their information to the NGO. Also contractor create their own template using NGO's template for labor. And labor book their information to that particular template. These all template related work is done by Advertisement feature. If any contractor misbehaves, NGO can block Contractor. And if any Labor misbehaves, Contractor can block that particular Labor.

1.3 SCOPE:

- Different user can create their own account
- Different user can perform such operations which they has rights to perform it.
- If suppose the user is Labor then these user can perform only basic tasks like,
    - Create an Account
    - Update Account
    - Search work
    - Booking
- If suppose the user is Contractor then these user can perform that task which they has rights like,
    - Create an account
    - Update account
    - Search work
    - Search person
    - Booking
    - Advertisement
    - Block
    - Send Message
- If suppose the user is NGO then these user can perform tasks relates to their category like,
    - Create an Account
    - Update Account
    - Search person
    - Advertisement
    - Block
    - Send Message

1.4 PROCESS MODEL



[Fig-1.1: Iterative Waterfall Model]

1.4.1 Advantages of Iterative model:

- In Iterative model we can only create a high-level design of the application before we actually begin to build the product and define the design solution for the entire product. Later on we can design and built a skeleton version of that, and then evolved the design based on what had been built.
- In Iterative model we are building and improving the product step by step. Hence we can track the defects at early stages. This avoids the download flow of the defects.

- In Iterative model we can get the reliable user feedback. When presenting sketches and blueprints of the product to users for their feedback, we are effectively asking them to imagine how the product will work.
- In Iterative model less time is spent on documenting and more time is given for designing.

1.4.2 Disadvantages of Iterative model:

- Each phase of an iterative is rigid with no overlaps.
- Costly System architecture or design issues may arise because not all requirements are gathered up front the entire Lifecycle.

1.4.3 Application of Iterative model:

- Requirement of the complete system are clearly defined and understood.
- Major requirement must be defined; however, some functionalities or request enhancements may evolve with time.
- There is a time to the market Constraint.
- A new Technology is being used and is being learnt by the development team while working on the project.
- Resources with needed skill set are not available and are planned to be used on Contract basis for specific intentions.
- There are some high risk features and goals with may changes in the future.

1.4.4 When to use Iterative model:

- Requirements of the complete System are clearly defined and understood.
- Major requirements must be defined; however, some details can evolve with time.

CHAPTER TWO

SYSTEM REQUIREMENTS SPECIFICATION

IN THIS CHAPTER

2. SYSTEM REQUIREMENTS AND SPECIFICATION

2.1 USER CHARACTERISTICS:

Mainly there are three users into the system, how they interact with the system is explained below;

1. Labor:
    - Some basic information about how to use the system.
    - Does not have any rights.

2. Contractor:
    - Some basic information about how to use the system.
    - Have rights like block, search and send mails to labor.

3. NGO:
    - Some basic information about how to use the system.
    - Have rights like block, search and send mails to contractor.

2.2 FUNCTIONAL REQUIREMENTS:

The functional requirements discuss the functionalities expected from the system. These are statements of services that provide how the system should react to particular inputs, and how the system should behave in particular situations. It describe relationship between input and output.

The functional requirements for Labor Management System is as below;

R1 ›› Registration

R 1.1 Create an Account

Input: Click on the **Create new account** button.

Output: Categories selection form opens.

R 1.2 Selection of categories

Input: Select any one category to register your account.

Output: Selected category form opens.

R 1.3 Register the details

Input: Fill all the details and click on the **Register** button.

Output: Login form opens.

R 1.4 Login Form

Input: Choose and enter your Username and Password.

Output: Welcome page opens.

R2 ›› Search work

R 2.1 Perform Search work operation

Input: Select the **Search work** option in the menu.

Output: "Search work" form opens

R 2.2 Fill the details

Input: Fill the work details which you want to search and click on **Search** button.

Output: Entered work list opens.

R3 ›› Search person

R 3.1 Perform Search person operation

Input: Click on **Search person** option

Output: Form will be pens on which you can enter the user's details which you want to search

R 3.2 Fill all the details

Input: Enter all the details of user and click on **Search** button.

Output: Entered user's all details will be displayed.

R4 ›› Advertisement

R 4.1 Perform Advertisement operation

Input: Click on **Advertisement** option to advertise your work.

Output: "Upload the advertisement" page opens.

R 4.2 Browse your advertisement

Input: Click on **Browse** button to browse your advertisement from your device.

Output: Dialog box opens which contain all files on our device.

R 4.3 Select files from opened dialog box

Input: Select file/s you want upload and click on **Ok** button.

Output: The file you selected will be displayed on your screen.

R 4.4 Edit your file

Input: Click on **Edit** button to edit your file.

Output: The file will be opened and you can edit on it.

R 4.5 Upload Advertisement

Input: Click on **Upload** button to upload your advertisement.

Output: "Your advertisement will be successfully uploaded" message displays.

R5 ›› Booking

R 5.1 Perform Booking operation

Input: Click on the button **Booking** which is shown on either advertisement or on your menu bar.

Output: Booking form opens.

R 5.2 Submit your details in the form

Input: Fill up the details in the form and click on **Submit** button.

Output: "Booking successful" message displays.

R6 ›› Block

R 6.1 Perform Blocking operation

Input: Click on **Block** option to block the appropriate person.

Output: The Blocking form will be opened.

R 6.2 Fill the details of particular one person

Input: Enter the username of person and click on **Block** button.

Output: "The person has been blocked" message displays.

R7 ›› Send message

R 7.1 Perform Send message operation

Input: Select **Send message** option to send message to particular user.

Output: "Send your message" form will be opens.

R 7.2 Enter the details

Input: Fill all the details of user which you want to send the message. Type your message in given text box and click on **Send** button.

Output: "Message will be sent" message displays.

R8 ›› Update Account

R8.1 Perform Update your account operation

Input: Select **Update Account** option to update your account.

Output: Page will be opened in which you can update your personal information.

R 8.2 Update your information

Input: Enter your new information in opened page and click on **Update** button.

Output: "Your account will be updated" message displays.

2.3 NON-FUNCTIONAL REQUIREMENTS:

Security:

Only authorized person can view and modify confidential details. Each User has his/her own access rights. For lower level user (free user) there are restrictions of not using some of the system components. One user cannot access other user's account

Scalability:

System should be capable to handle growing amount of work. Performance of the system should not devalue when many users are logged-in and accessing the database at the same time. The system must be scalable enough to be able to add any additional functionality even after the project is developed once.

Reliability:

The database of various modules like User Information, Advertisement Information, Booking Information, etc. maintained by the system should be correct and maintained up to date.

Usability:

The system provide user friendly environment to its users and it's easy to access its various features. In the Email id, the user will not be able to enter any dummy value, the validation will check that whether there is '@' or '.' symbol in that. We have integrate many functionality in this system like create an account, update account, searching, block, advertisement, booking, etc.

CHAPTER THREE

SYSTEM ANALYSIS

MODELING - USER BASED

IN THIS CHAPTER

3. SYSTEM ANALYSIS MODELING – USER – BASED

3.1 FEASIBILITY STUDY OF THE NEW SYSTEM

Technical Feasibility

Technical Feasibility is centered on the computer system such as hardware, software etc. Which determines whether the available technical system is feasible to run our current application project or not? Minimum hardware configuration required to develop and to use the current software application determines the Technical Feasibility. It concern with the primary memory and secondary storage as well as the speed of the processor.

Yes, our project is technically feasible.

In our project following hardware are required:

- Processor
- Memory
- Secondary Requirement
- 1GB RAM
- P4 processor or above

Following are Software requirements:

- Windows XP or above and mac OS, etc.
- Require Internet connection

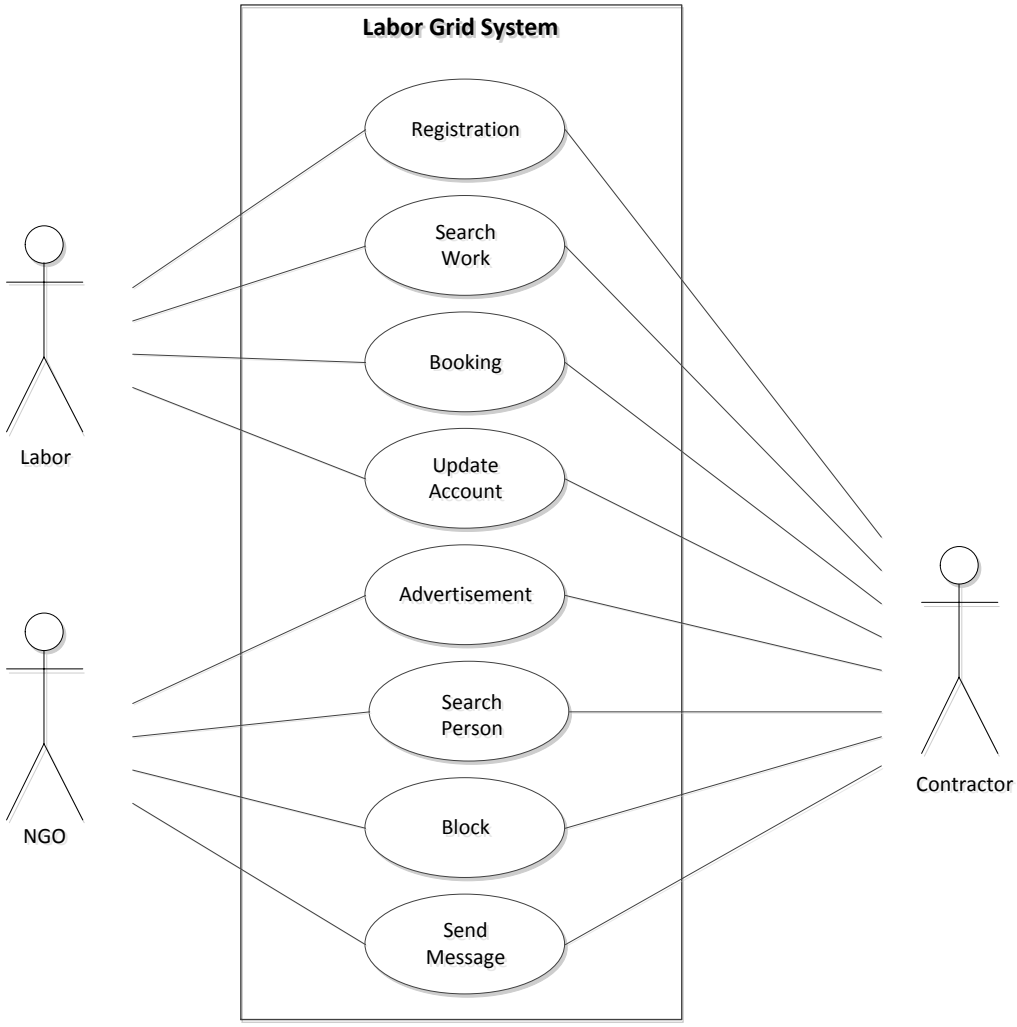
This all hardware and software requirements easily available in computers.

Economic Feasibility:

Economic analysis is most frequently used method for evaluating the effectiveness of system. This is commonly known as cost/benefit analysis. The procedure is to determine the benefit and saving that are expected from a system and compare them with cost, whether is economically feasible or not? If yes, then the design is made to design and implement the system. It is determining whether software is in budget to develop or not. Yes, our project is feasible economically. Because in our system all work done in PHP.

3.2 USER BASED MODELING

3.2.1 USE CASE DIAGRAMS:



[Fig-3.1: Use-case diagram]

CHAPTER FOUR

SYSTEM ANALYSIS AND DESIGN - DATA BASED

IN THIS CHAPTER

4. SYSTEM ANALYSIS AND DESIGN – DATA-BASED

4.1 DATA MODELING

4.1.1 DATA DICTIONARY

LaborInformation:

Name	Type	Size	NULL	Key
Name	varchar	30	NO	
DateOfBirth	date		YES	
Age	int	2	YES	
Gender	varchar	10	NO	
Aadhar No.	int	12	NO	Unique Key
MobileNumber	int	12	NO	Primary Key
Email ID	varchar	30	YES	
Address	varchar	100	NO	
Village	varchar	30	NO	
Taluka	varchar	30	NO	
District	varchar	30	NO	
WorkType	varchar	30	NO	
Experience	varchar	100	YES	
Username	varchar	50	NO	Unique Key
Password	varchar	10	NO	

ContractorInformation :

Name	Type	Size	NULL	Key
Name	varchar	30	NO	
DateOfBirth	date		YES	
Age	int	2	YES	
Gender	varchar	10	NO	
Aadhar No.	int	12	NO	Unique Key
MobileNumber	int	12	NO	Primary Key
Email ID	varchar	30	YES	
Address	varchar	100	NO	
Village	varchar	30	NO	
Taluka	varchar	30	NO	
District	varchar	30	NO	
WorkType	varchar	30	NO	
Experience	varchar	100	YES	
Username	varchar	50	NO	Unique Key
Password	varchar	10	NO	
NumberOfLabors	int	10	YES	

NGOInformation:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Unique Key
Password	varchar	10	NO	
Email ID	varchar	30	YES	
MobileNumber	int	12	NO	Primary Key
Aadhar No.	int	12	NO	Unique Key
WorkType	varchar	30	NO	
HQ Address	varchar	50	NO	

Sign In Information:

Name	Type	Size	NULL	Key
Category	varchar	20	NO	

Log In Information:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Primary Key
Password	varchar	10	NO	

Work Information:

Name	Type	Size	NULL	Key
WorkType	varchar	50	NO	Primary Key
WorkAddress	varchar	10	NO	
WorkVillage	varchar	10	NO	
WorkTaluka	varchar	10	NO	
WorkDistrict	varchar	10	NO	
WorkDuration	varchar	20	NO	

SearchWork:

Name	Type	Size	NULL	Key
WorkType	varchar	30	NO	Primary Key
District	varchar	30	YES	

SearchPerson:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Primary Key
WorkType	varchar	30	YES	
Category	varchar	20	NO	

Booking:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Primary Key
Password	varchar	10	NO	
MobileNumber	int	12	NO	
Email ID	varchar	50	YES	

Block:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Primary Key
MobileNumber	int	12	NO	
Email ID	varchar	50	YES	

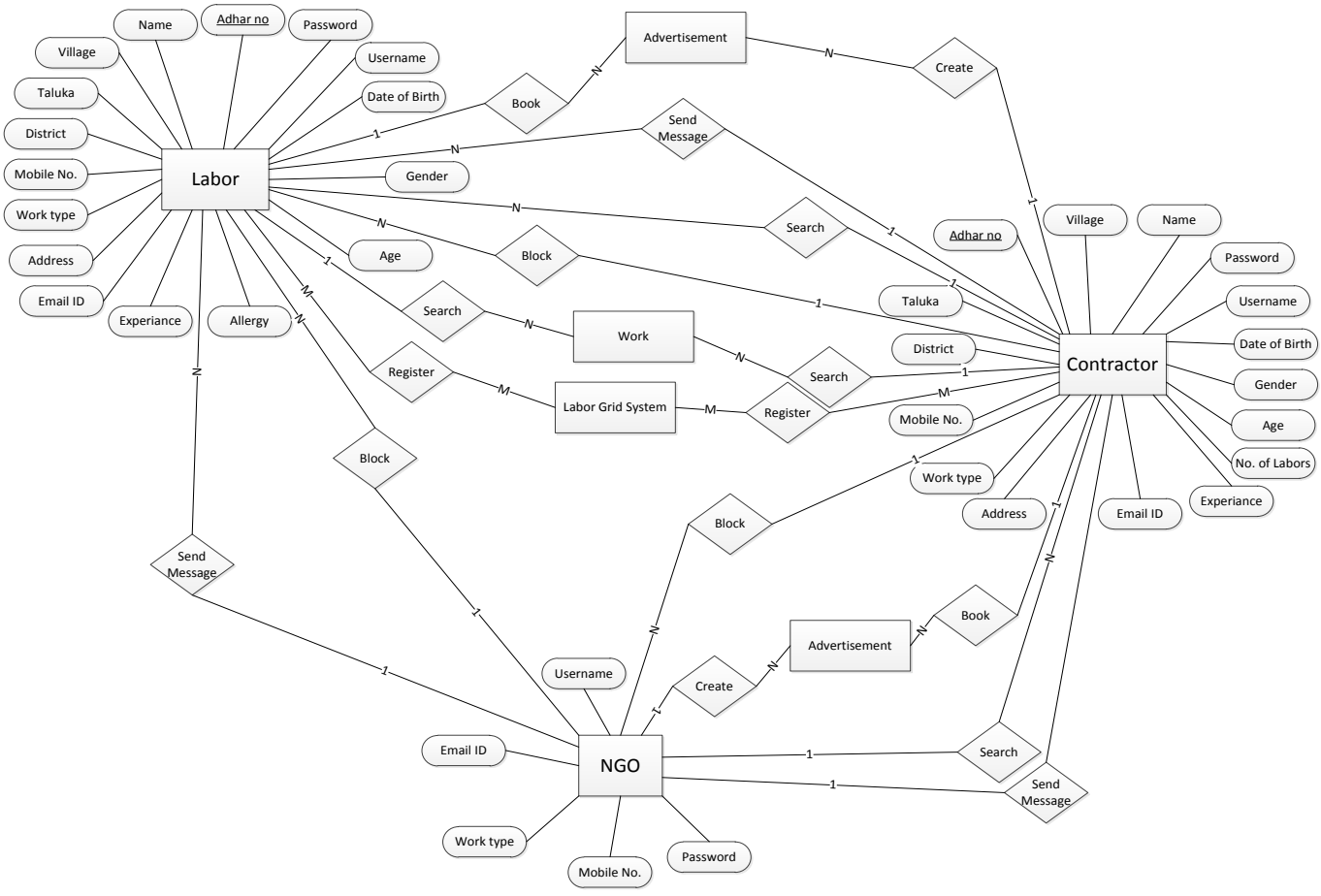
SendMessage:

Name	Type	Size	NULL	Key
Username	varchar	50	NO	Primary Key
UserMobileNo	int	12	NO	
UserEmail ID	varchar	50	YES	
WorkType	varchar	30	NO	
WorkAddress	varchar	100	NO	
WorkVillage	varchar	30	NO	
WorkTaluka	varchar	30	NO	
WorkDistrict	varchar	30	NO	
WorkStartingDate	date	50	NO	
WorkEndingDate	date	50	NO	
WorkTime	datetime	50	NO	
SalaryPerDay	int	50	NO	
MessageSendDate	date	50	NO	

Advertisement:

Name	Type	Size	NULL	Key
AdvertisementName	varchar	50	NO	
Advertisement Id	varchar	50	NO	Primary Key
AdvertisementType	varchar	50	NO	
AdvertisementDate	date	10	NO	
AdvertisementTime	datetime	10	NO	

4.1.2 E-R DIAGRAM

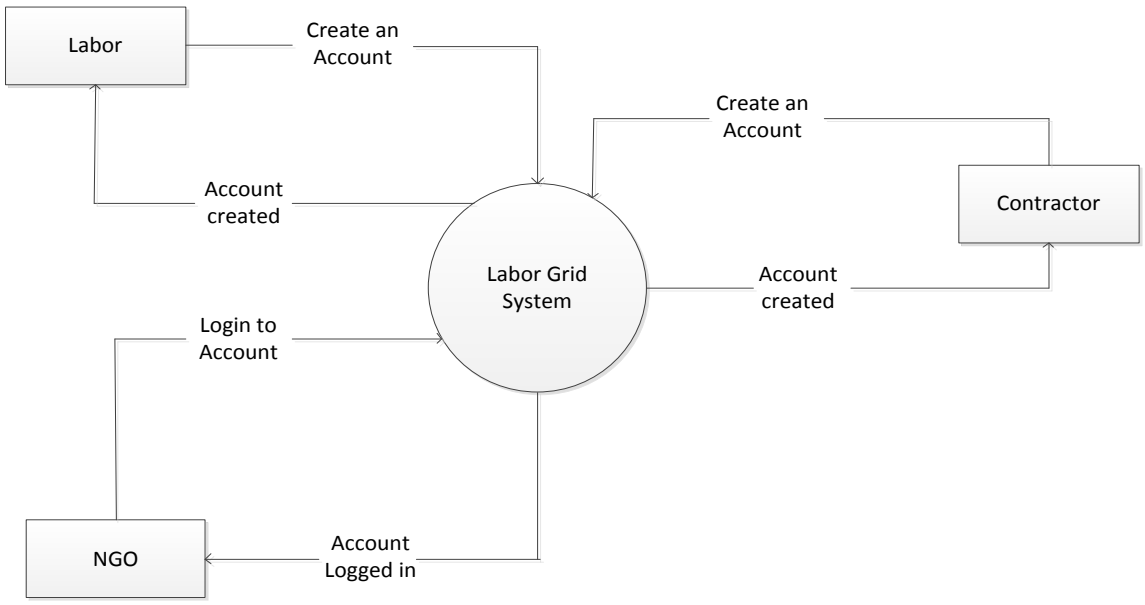


[Fig-4.1: E-R diagram]

4.2 BEHAVIOUR MODELING

4.2.1 DATA FLOW DIAGRAM

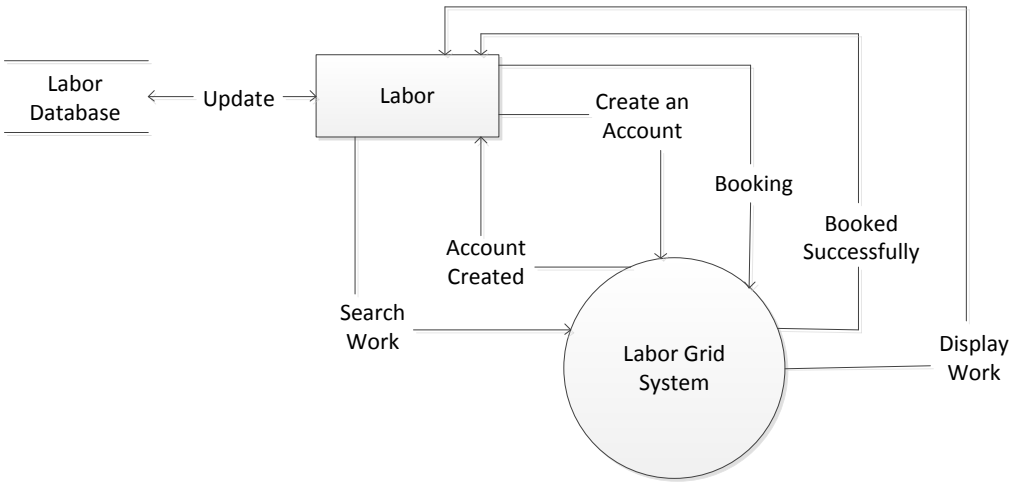
4.2.1.1 CONTEXT LEVEL DIAGRAM (LEVEL 0)



[Fig-4.2: DFD level 0 (Context) Diagram]

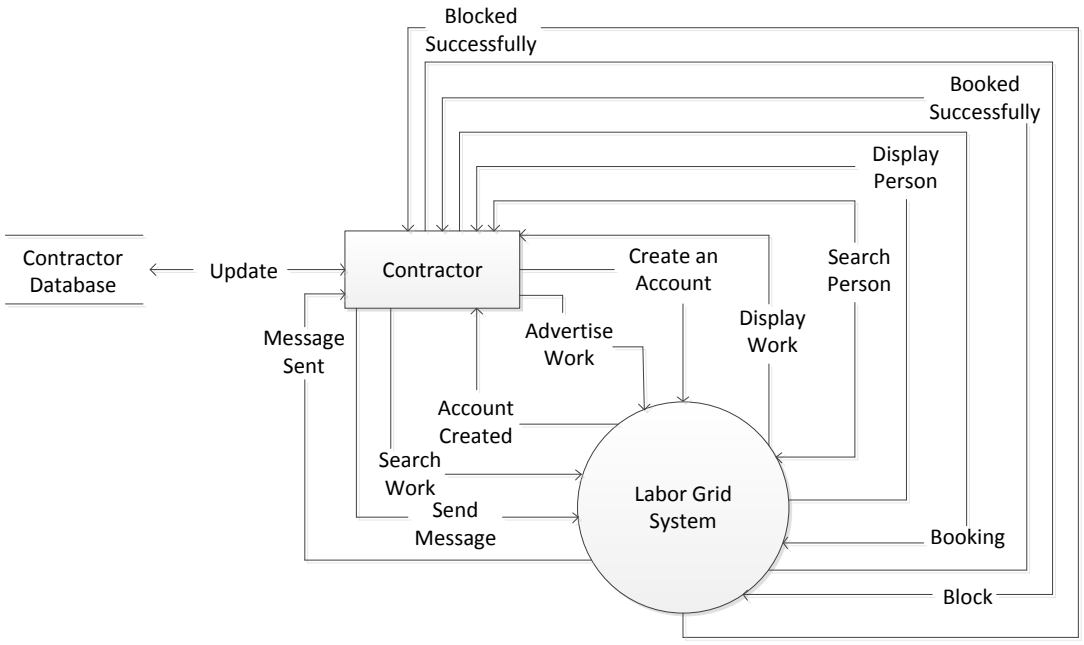
4.2.1.2 DFD – LEVEL1

- **DFD level1 for labor**



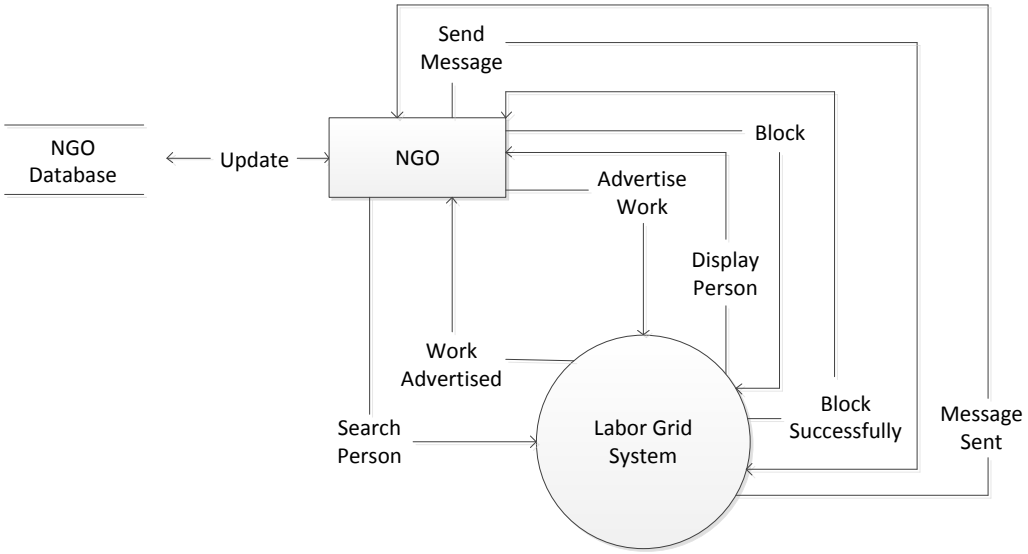
[Fig-4.3: DFD level 1 Diagram for labor]

- **DFD level 1 for Contractor**



[Fig-4.4: DFD level 1 Diagram for Contractor]

- **DFD level 1 for NGO**



[Fig-4.5: DFD level 1 Diagram for Contractor]

CHAPTER FIVE

SYSTEM DESIGN -UML

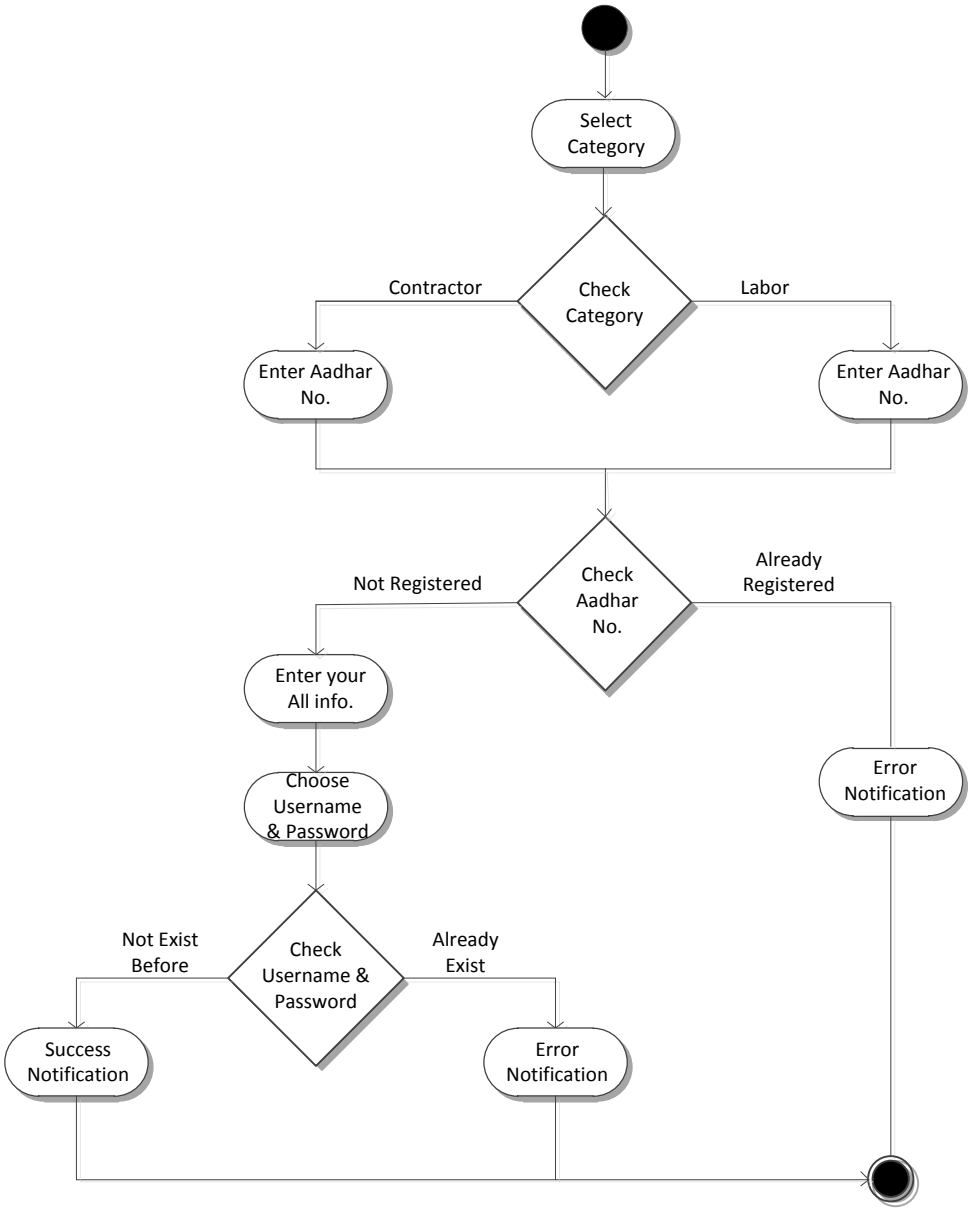
IN THIS CHAPTER

5.1 ACTIVITY DIAGRAM

5. SYSTEM DESIGN – UML

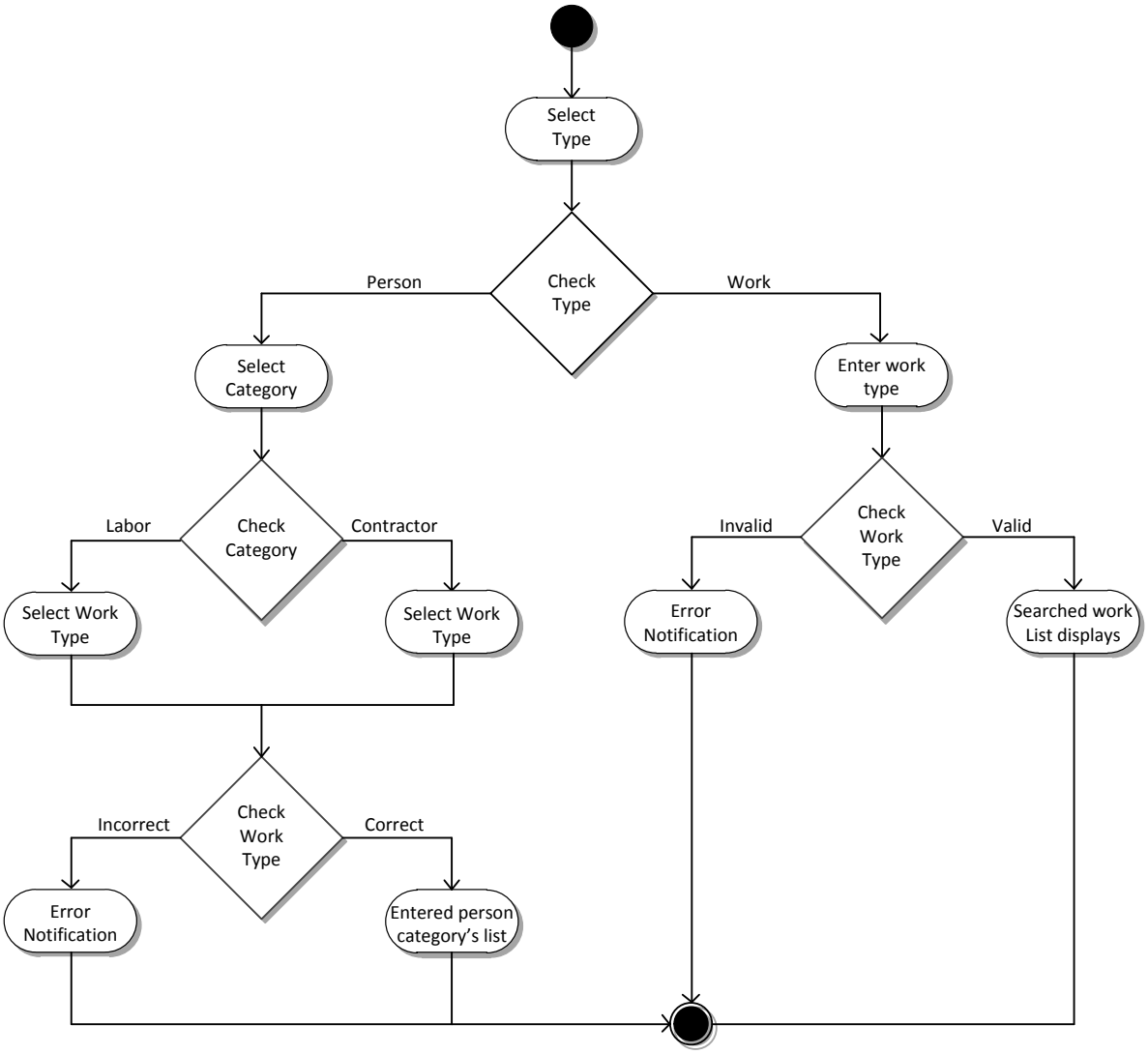
5.1 ACTIVITY DIAGRAM

For Registration



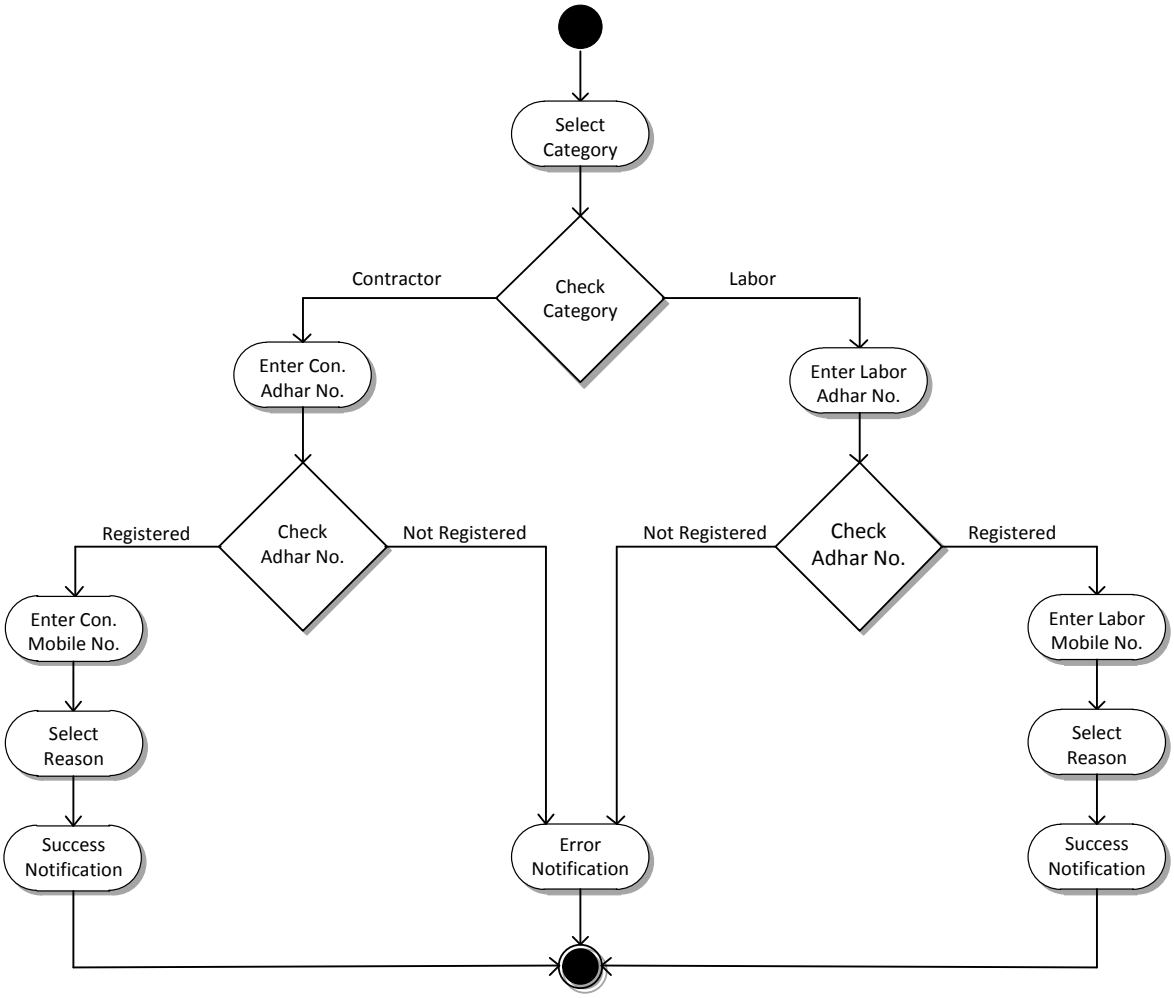
[Fig-5.1: Activity Diagram for Registration]

For Searching



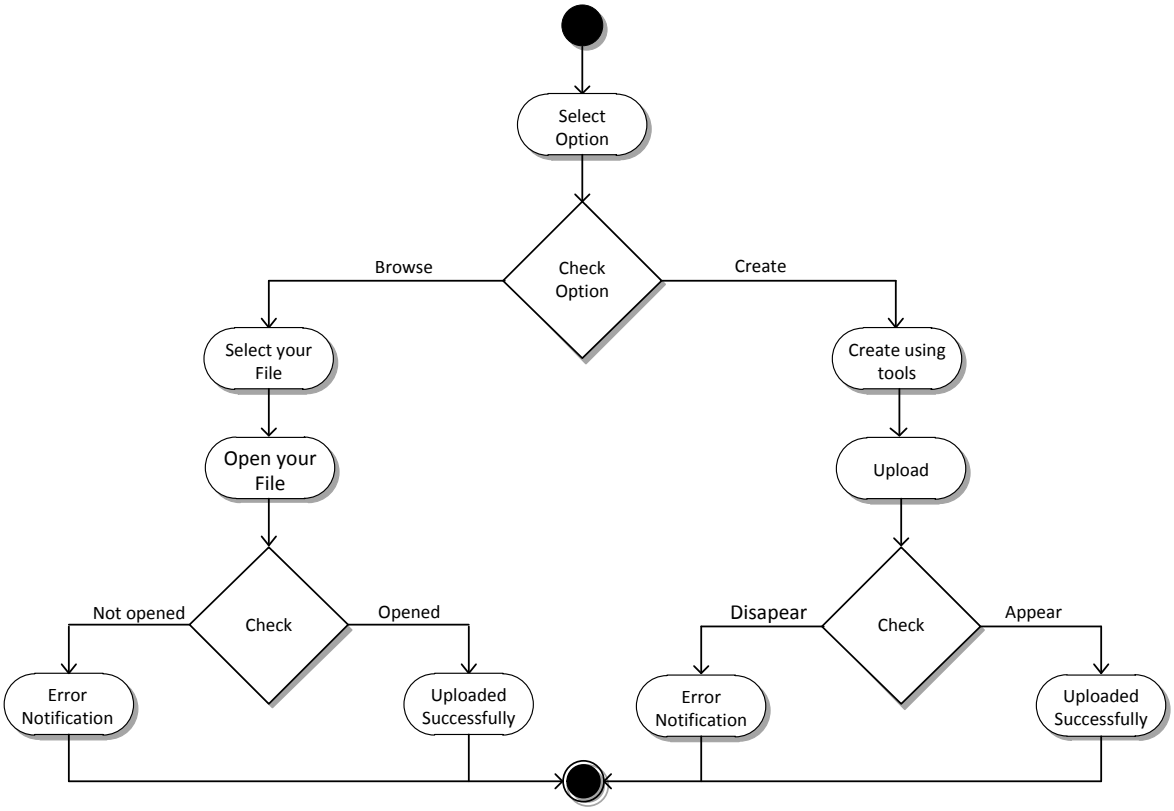
[Fig-5.2: Activity Diagram for Searching]

For Blocking



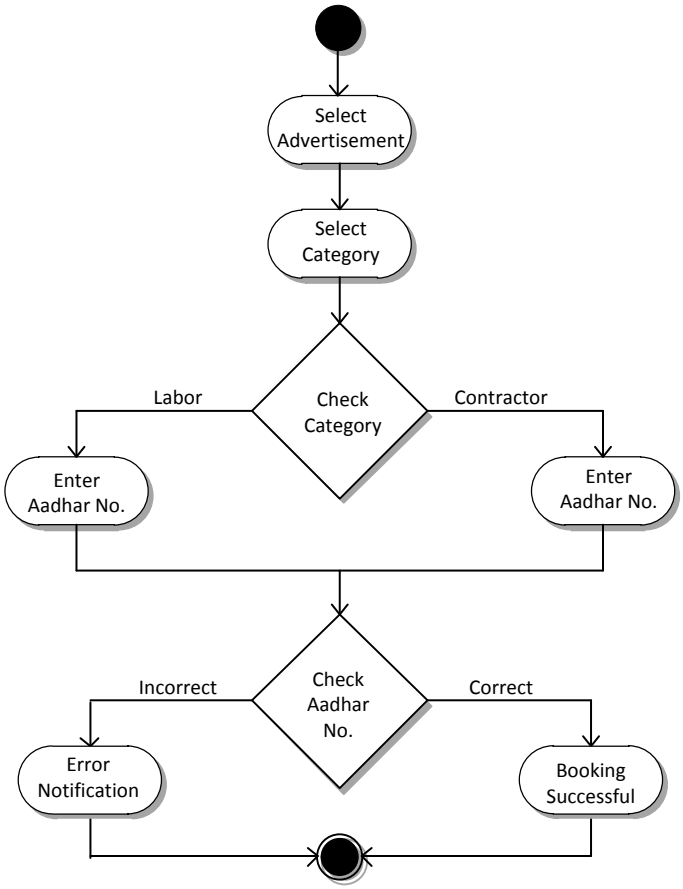
[Fig-5.3: Activity Diagram for Blocking]

For Advertisement



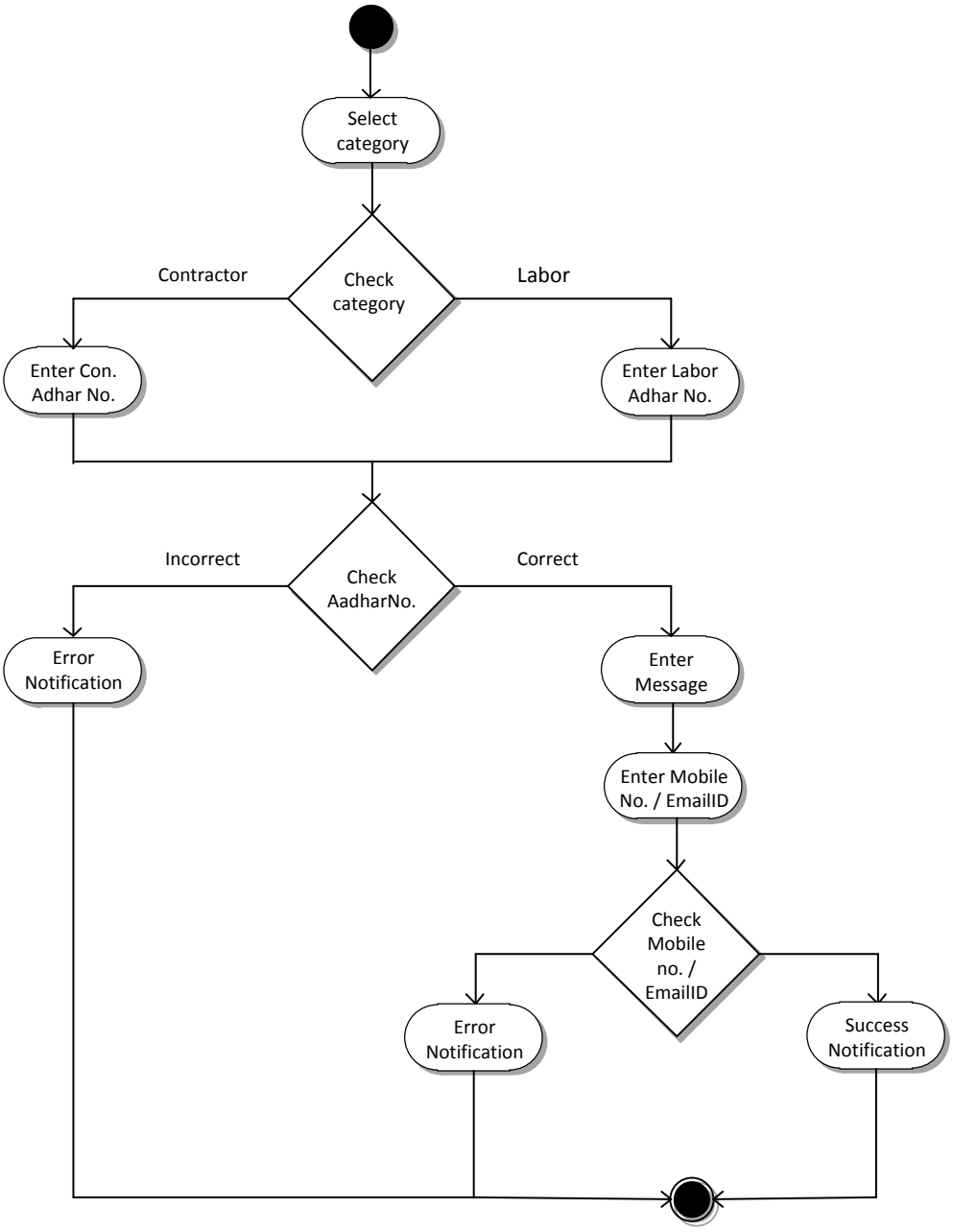
[Fig-5.4: Activity Diagram for Advertisement]

For Booking



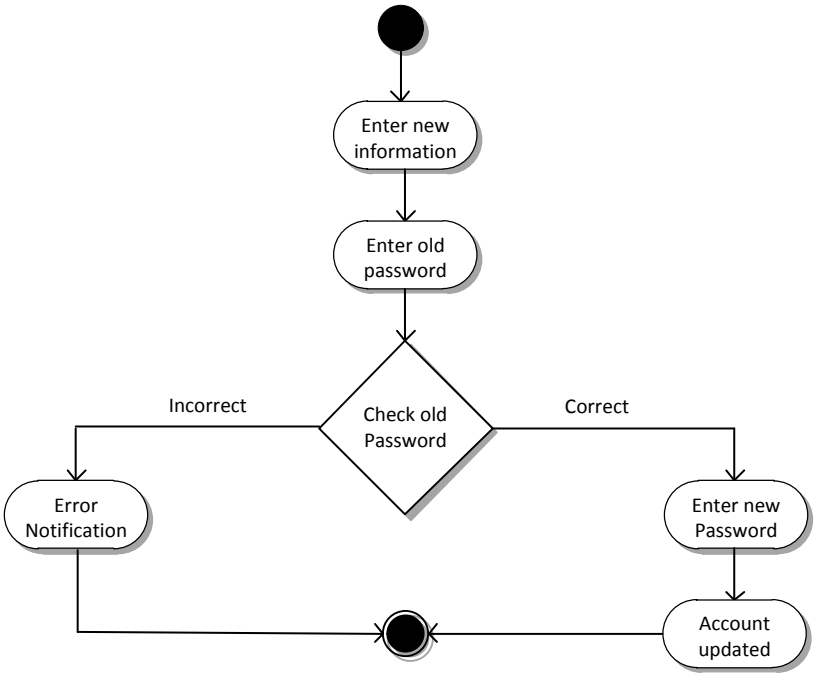
[Fig-5.5: Activity Diagram for Booking]

For Send Message



[Fig-5.6: Activity Diagram for Send Message]

For Update Account



[Fig-5.7: Activity Diagram for Advertisement]

CHAPTER SIX

SYSTEM INTERFACE DESIGN

IN THIS CHAPTER